

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-5. (Cancelled).

6. (Previously Presented) A communication terminal device comprising:
a communication unit configured to communicate with a provider of an application program via a communication network;
an execution unit configured to execute an application program, wherein the application program includes a specified command;
a suspend unit configured to suspend execution of the application program in response to execution of the specified command; and
an upgrade unit configured to upgrade the application program, by communication via the communication unit with the provider, in response to suspension of the application program.

7. (Previously Presented) The communication terminal device of claim 6, wherein the execution unit is configured to resume execution of the application program after the upgrade unit completes an upgrade of the application program.

8. (Previously Presented) The communication terminal device of claim 6, further comprising:

the upgrade unit further configured to determine whether an upgrade of the application program can be completed;
the execution unit further configured to resume execution of the application program without the upgrade in response to determination that the upgrade of the application program cannot be completed;

the upgrade unit further configured to upgrade the application program in response to determination that the upgrade of the application program can be completed; and

the execution unit further configured to resume execution of the application program in response to completion of the upgrade of the application program, wherein the application program further includes the upgrade.

9. (Previously Presented) The communication terminal device of claim 8, further comprising:

a detection unit configured to detect an event that indicates the upgrade of the application program should be terminated;

the upgrade unit is further configured to terminate the upgrade of the application program in response to detection of the event; and

the execution unit further configured to resume execution of the application program without the upgrade in response to termination of the upgrade of the application program.

10. (Previously Presented) A computer readable storage medium storing a program for causing a computer device to execute a process, the process comprising:

communicating with a provider of an application program via a communication network;

executing an application program, wherein the application program includes a specified command;

suspending execution of the application program in response to execution of the specified command; and

upgrading the application program through communications with the provider in response to suspension of execution of the application program.

11. (Previously Presented) A communication terminal comprising:

a processor in communication with a memory, wherein the memory includes an application program, wherein the application program comprises an update command;

a communication unit coupled to the processor, the communication unit configured to communicate with an application provider; and

the processor configured to execute the application program, wherein the processor subsequently executes the update command, and the processor is further configured to suspend the application program and to download an update for the application program from the application provider in response to execution of the update command.

12. (Previously Presented) The communication terminal of claim 11, wherein the processor is further configured to detect a completed download of the update for the application program, and in response to detection of the completed download of the update for the application program, the processor is further configured to resume execution of the application program, wherein the application program includes the update.

13. (Previously Presented) The communication terminal device of claim 11, further comprising:

the processor further configured to set a state of a completion condition, the state comprising at least one of a download success state and a download incomplete state, wherein the processor is further configured to set the completion condition to the download success state in response to a successful download of the update for the application program, and wherein the processor is further configured to set the completion condition to the download incomplete state in response to an unsuccessful download of the update for the application program;

the processor further configured to detect the completion condition set to the download incomplete state, and the processor further configured to resume execution of the application program without the update for the application program in response to detection of the completion condition set to the download incomplete state; and

the processor further configured to detect the completion condition set to the download complete state, and in response, to resume execution of the application program, wherein the application program further includes the update for the application program.

14. (Previously Presented) The communication terminal according to claim 11, further comprising:

the processor further configured to set a state of a completion condition, the state comprising at least one of a download success state and a download incomplete state, wherein the processor is further configured to set the completion condition to the download success state in response to a successful download of the update for the application program, and wherein the processor is further configured to set the completion condition to the download incomplete state in response to an unsuccessful download of the update for the application program;

the processor further configured to detect an upgrade failure event and the completion condition set to the download incomplete state, and in response to detection of both the upgrade failure event and the download incomplete state, the processor further configured to terminate the download of the update for the application program; and

the processor further configured to resume execution of the application program without the upgrade for the application program in response to the upgrade failure event.

15. (Previously Presented) The communication terminal according to claim 14, wherein the processor is further configured to detect the upgrade failure event and the completion condition set to the download success state, and the processor is further configured to resume execution of the application program in response to detection of both the upgrade failure event and download success state, wherein the application program further includes the update for the application program.

16. (Previously Presented) A method to automatically update a program comprising:

- a mobile terminal executing an application program comprising instructions, wherein the instructions include an update invoke instruction;
- the mobile terminal executing the update invoke instruction;
- the mobile terminal determining an availability of an update for the application program from an application program provider in response to execution of the update invoke instruction;
- the mobile terminal suspending execution of the application program in response to determination that the update for the application program is available;

the mobile terminal downloading the update for the application program in response to determination that the update for the application program is available;

the mobile terminal detecting a download completion for the update for the application program; and

the mobile terminal resuming execution of the application program in response to detection of the download completion, wherein the application program includes the update for the application program.

17. (Currently Amended) The method of claim 16, wherein the mobile terminal determining the availability of the update for the application program further comprises:

the mobile terminal acquiring specified time-date data for the application program in response to commencement of execution of the application program;

the mobile terminal acquiring a current date data;

the mobile terminal comparing the specified time-date data to the current date data; and

the mobile terminal determining that the update for the application program is available in response to comparison of the specified time-date_{[[a]]} data to the current date data.

18. (Currently Amended) The method of claim 16, wherein the mobile terminal determining the availability of the update for the application program further comprises:

the mobile terminal acquiring specified time-date data for the application program in response to commencement of execution of the application program;

the mobile terminal acquiring a current date data;

the mobile terminal determining that the update for the application program is unavailable in response to comparison of the specified time-data_{[[e]]} data to the current date data; and

the mobile terminal continuing execution of the application program without the update in response to determination that the update for the application program is unavailable.

19. (Previously Presented) The method of claim 16, wherein the mobile terminal determining the availability of the update for the application program further comprises:

the mobile terminal receiving an update message from at least one of the application program provider or a content provider; and

wherein the mobile terminal generating the update available indication in response to determination that the update for the application program is available further includes generating the update available indication in response to receipt of the update message.

20. (Previously Presented) The method of claim 16, wherein the mobile terminal is in communication with the application provider via a wireless communication network, the method further comprising:

the mobile terminal detecting a radio field intensity associated with the wireless communication network;

the mobile terminal comparing the radio field intensity to an intensity threshold;

wherein determining the availability of the update of the application program further comprises:

the mobile terminal generating an update unavailable indication in response to the radio field intensity being less than the intensity threshold; and

the mobile terminal continuing execution of the application program without the update in response to the update unavailable indication.

21. (Previously Presented) The method of claim 16, wherein the mobile terminal includes a battery, and wherein the mobile terminal downloading the update for the application program further comprises:

the mobile terminal detecting that a charge on the battery is insufficient to complete a download of the update for the application program;

the mobile terminal generating an update unavailable indication in response to detection that the charge on the battery is insufficient to complete the download of the update for the application program.

22. (Currently Amended) A computer-readable recording media for storing instructions which, when executed, cause the processor to perform a process comprising:

execution of an application program, wherein the application program includes an update instruction;

determination that an update for the application program is available in response to execution of the update instruction;

suspension of execution of the application program in response to determination that the update for the application program is available;

download of the update for the application program in response to determination that the update for the application program is available;

detection of a download completion of the update for the application program; and

resumption of execution of the application program in response to detection of the download completion, wherein the application program includes the update for the application program.

23. (Currently Amended) The computer-readable recording media of claim 22, wherein determination that the update for the application program is available further comprises:

acquisition of specified time-date data associated with the update for the application program in response to commencement of execution of the application program;

acquisition of a current date data; ~~computer program code to compare the specified time-date data to the current date data;~~ and

comparison of the specified time-date data to the current date data; and

determination that the update for the application program is available in response to comparison of the specified time-date~~[[a]]~~ data to the current date data.

24. (Currently Amended) The computer-readable recording media of claim 22, wherein determination that the update for the application program is available further comprises:

acquisition of the specified time-date data associated with the update for the application program in response to commencement of the application program;

determination that the update for the application program is unavailable in response to comparison of the specified time-date~~[[a]]~~ data to the current date data; and

continuation continuation of execution of the application program without the update in response to determination that the update for the application program is unavailable.

25. (Currently Amended) The computer-readable recording media of claim 22, wherein determination that the update for the application program is available further comprises:

receipt of an update message from at least one of an application program provider or a content provider; and

generation of an update available indication in response to receipt of the update message.

26. (Previously Presented) A communication terminal comprising:

a communication unit in communication with an application provider;

a processor in communication with the communication unit;

a memory in communication with the processor, wherein the memory comprises executable program code for an application program, wherein the application program includes a specified command;

the processor is further configured to execute the application program;

wherein the processor is configured to suspend execution of the application program and download an update for the application program from the application provider in response to execution of the specified command; and

the processor is further configured to generate an update condition, wherein the update condition comprises an update completed state or an update failed state, and wherein the processor is further configured to resume execution of the application program without the update based on generation of the update failed state, and the processor is configured to resume execution of the application program with the update based on generation of the update completed state.

27. (Previously Presented) The communication terminal of claim 26, wherein the update condition further comprises an update abort state, wherein the processor is further configured to detect a stop update event and in response to the stop update event the processor is further configured to abort the update of the application program.